

## NASA Space Operations Approaches to Reduce Operations Costs

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### ABSTRACT

NASA has re-organized the processes and methods of Space Operations in order to reduce costs and to provide the mechanisms to encourage the NASA Centers to move routine operations from a government staff function to a contractor function. The NASA space operations goals are:

1. Consolidate and integrate operations across the Agency to reduce operating costs.
2. Transition the civil service and JPL/CAL Tech work force from routine, day-to-day operations to science, research, and development, except for core competencies.
3. Transition all operation contracts for products and services to performance based contracting.
4. Transition the operations functions that generate products and services to outsourcing, privatization, and, ultimately, commercialized services.
5. Restructure management and operational processes using the concept of customer/service providers.
6. Emphasize the use of technology to reduce operations costs and increase standardization and inter-operability, while meeting the strategic mission needs of the NASA Enterprises.

The rationale for these goals and changes will be described. The processes that will lead to true end-to-end design trades early in the study phase of new missions are a key element of the new approach. Placing emphasis on industry to provide routine operations will lead to increased industry capability and enable NASA to emphasize - once again - missions and technology that will be needed for the next generation of space exploration. An RFP was issued in February of 1997 with a contract awarded to at least two contractors to perform a six month architectural study of NASA Integrated Space Operations was issued in April 1997. The scope of this RFP will be described along with the schedule for a contract selection.

NASA Space Operations Office is a service provider. Data Services and Mission Services are provided to mission and projects - for a fee. NASA will enter into full cost accounting in Fiscal Year 1999. How this financial approach changes the way that space operation services are provided is significant. The relationship between full cost accounting, life cycle design trades, service definitions will be described along with positive and negative attributes of these changes.

The status of the organizational changes and the processes that are now in place will be described. Changes which have taken place at each of four prime operations centers (Goddard Space Flight Center, Marshall Space Flight Center, Johnson Space Center and the Jet Propulsion Laboratory) will be discussed along with how these changes related to the space operations goals listed above.